

DO-27 Plastic-Encapsulate Diodes

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V-100V
- High surge current capability
- Polarity: Color band denotes cathode

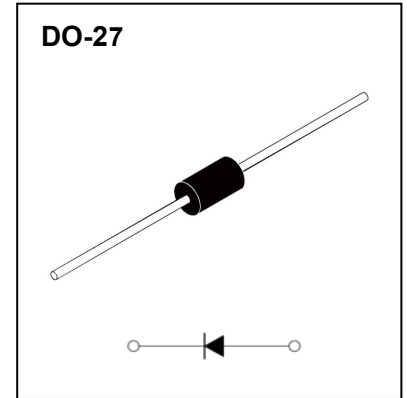
Applications

- Rectifier

Marking

- SB3XX

X : From 20 To 100



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	SB3						
				20	30	40	50	60	80	100
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100
Maximum RMS Voltage	V _{RMS}	V		14	21	28	35	42	56	70
Maximum DC Blocking Voltage	V _{DC}	V		20	30	40	50	60	80	100
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave, Resistance load,TL(Fig.1)	3.0						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 cycle , Ta =25℃	80						
Junction Temperature	T _J	℃		-55~+125			-55 ~ +150			
Storage Temperature	T _{STG}	℃		-55 ~ +150						

Electrical Characteristics (T=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	SB3						
				20	30	40	50	60	80	100
Maximum Peak Forward Voltage	V _{FM}	V	I _{FM} =3.0A	0.55			0.7		0.85	
Maximum Peak Reverse	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25°C		0.1				
	T _a =125°C			10						
Typical junction capacitance	C _J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	250			160			
Typical Thermal Resistance	R _{θJ-A}	°C /W	Between junction and ambient	40						
	R _{θJ-L}		Between junction and lead	20						

Notes:

1) Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

Typical Characteristics

FIG.1 FORWARD CURRENT DERATING CURVE

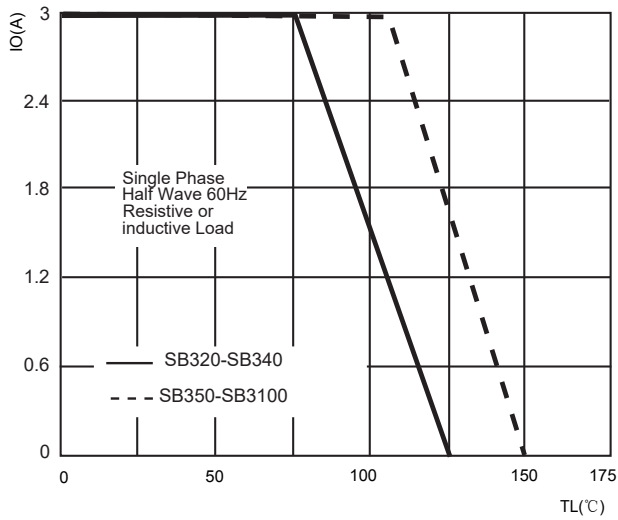


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

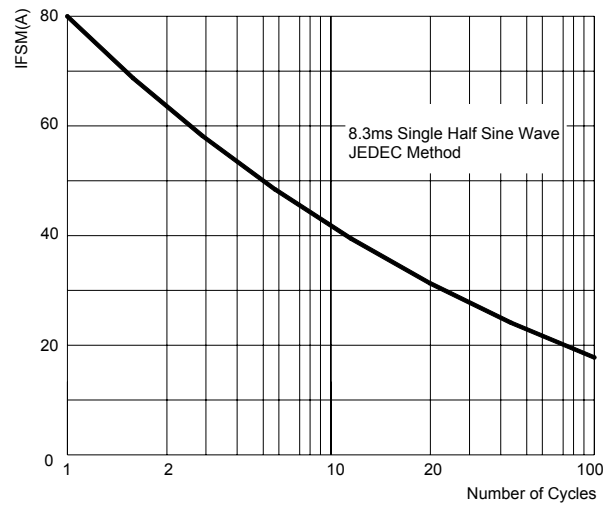


FIG.3: TYPICAL FORWARD CHARACTERISTICS

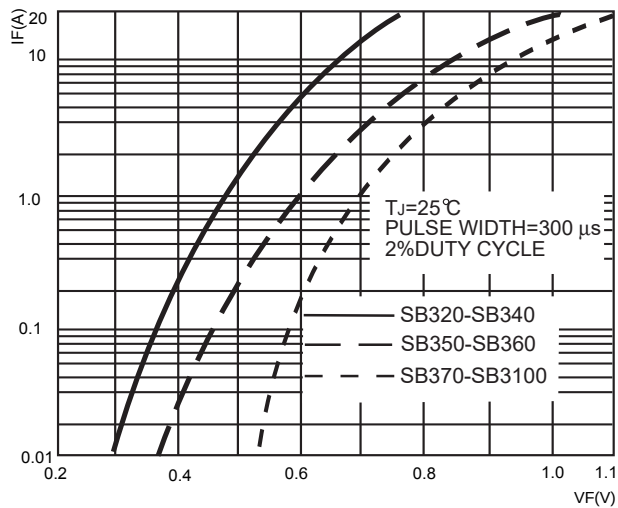
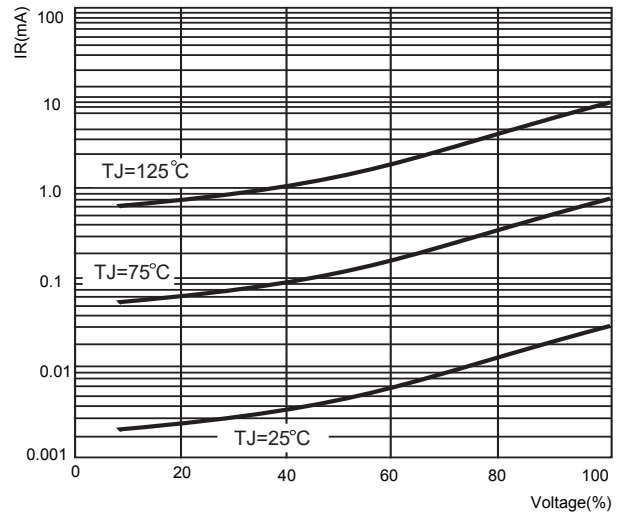
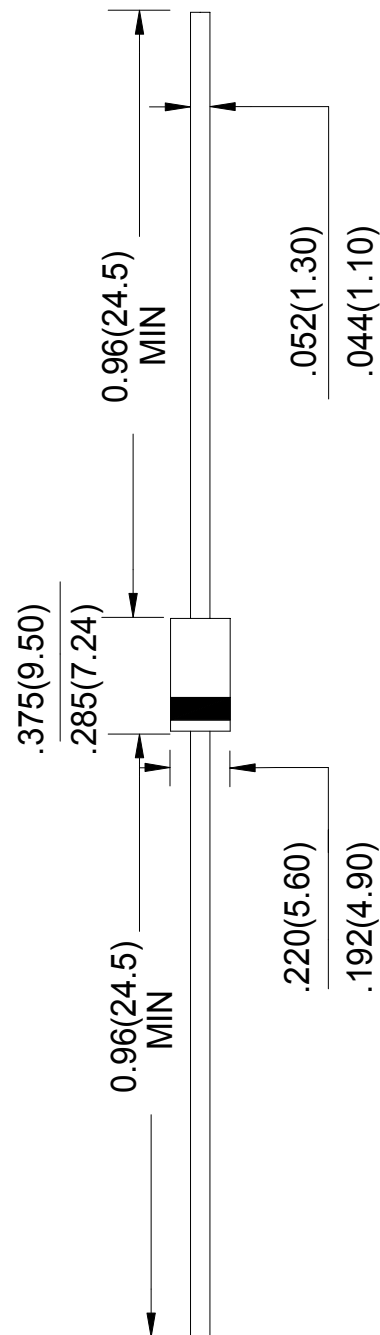


FIG.4: TYPICAL REVERSE CHARACTERISTICS





Unit: in inches (millimeters)